Methods for the relative quantitation of the human plasma lipidome by liquid chromatography coupled with mass spectrometry using minimal sample manipulation

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Abstract

Extraction protocols and liquid chromatography coupled with mass spectrometry (LC-MS) and tandem mass spectrometry methods (LC-MS/MS) for the measurement of five lipid categories, namely; glycerophospholipids, glycerolipids, sphingolipids, sterol lipids and fatty acyls in human plasma are described here. Step-by-step instructions are provided for the liquid/liquid extraction methods, including solution preparation and the non-endogenous lipid internal standards used. All instrumental conditions, chromatography columns and solutions required for the LC-MS and LC-MS/MS methods are also detailed.

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Protocol for paper -Final.doc available at https://authorea.com/users/612177/articles/640232-methods-for-the-relative-quantitation-of-the-human-plasma-lipidome-by-liquid-chromatography-coupled-with-mass-spectrometry-using-minimal-sample-manipulation